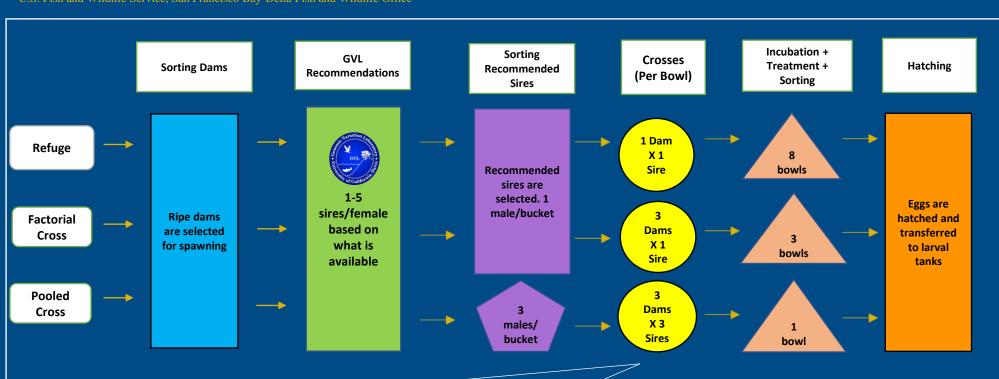
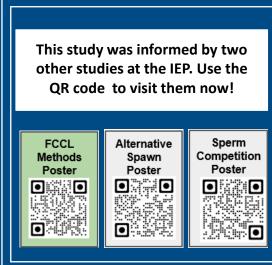
## **FCCL Spawning Methods**

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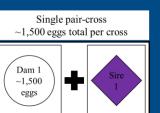


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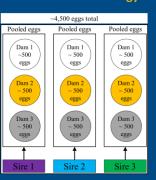








## First Alternative: Factorial Cross Strategy



## Second Alternative: Pooled Cross Strategy

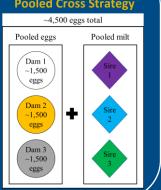


Table 1. A comparison of refuge, factorial, and pooled spawning methods.

	Refuge Spawning	Factorial Spawning	Pooled Spawning
Crosses	(1X1 parental cross) x 8	(3X1 parental cross) x 3 No sperm competition.	3X3 parental cross. With sperm competition.
Space	8 bowls in incubation	3 bowls in incubation	1 bowl in incubation
Time and Labor	8 bowls to treat, sort and consolidate to a column	3 bowls to treat, sort and consolidate to a column	1 bowl to treat, sort and consolidate to a column
Genetic Variance	Healthy refuge population	See Alternative Spawning poster	See Alternative Spawning poster